Express5800/320Lb Software Notes

EXPRESSBUILDER 3.005b-G Update Notes

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Overview

This document describes the procedure to upgrade the specific drivers and software for your 320Lb (FT Control Software) to version 2.0.1. In addition to general code improvement and minor fixes, the FT Control Software 2.0.1 adds support for 1GB DIMM, ExpressCluster software and Microsoft Windows 2000 Service Pack 4. If you plan to install any of the following: 1GB DIMM memory sticks, use NEC ExpressCluster software or Microsoft Windows 2000 Service Pack 4, please upgrade your 320Lb FT Control Software to version 2.0.1

FT Control Software version 2.0.1 Upgrade Procedure for 320Lb

Prerequisites for Upgrade

A. Back up the system boot disks prior to performing this upgrade in the event of the rare occurrence that the OS fails to start during or after the upgrade.
B. BIOS Version 3.4.1 installed.
C. The 363-01639-002 EXPRESSBUILDER CD version 3.005b-G.
D. Microsoft Windows 2000 Service Pack 4 CD or the Service Pack 4 executable saved on your local hard drive.
E. The 455-01705-000 EXPRESSBUILDER 3.005b-G Update Notes (this document).
F. The Veritas Volume Manager 3.1 License Key.
G. The 456-01675-000 Express5800/320Lb/320Lb-R User's Guide (available on EXPRESSBUILDER).
H. 1 GB DIMMs are not installed.
I. Document the Network (LAN) teaming configuration in the Intel PROSet II utility so that they can be restored after the upgrade.
J. Document the disk mirroring configuration so that it can be restored after the upgrade, if necessary.
K. Review the documentation below.

Cautions and Restrictions

a. The 320Lb may appear to hang with a blank screen when shutting down prior to a restart. This behavior has typically been noted when a USB to PS2 converter is used for the mouse and/or keyboard, with or without a KVM switch. As a workaround for this situation, remove and replace the keyboard/mouse USB cable in the USB port. System operation should continue after the cable is removed.
b. As with any change in memory configuration under a Microsoft Windows operating system, the paging size should be reviewed and changed if required.
c. The memory dump location in Startup and Recovery section of System properties should be reviewed after any memory

upgrade to ensure sufficient disk space exists in the designated location to accommodate the dump file.

d. The VERITAS Volume Manager Hot Relocation and Hot Spare functions, which are installed by default, are not supported on the NEC Express5800/ft series.

e. Do not read or write data on the system during the upgrade process.

FT Control Software version 2.0.1 Upgrade Procedure

1. Confirm that the install ft control software version is prior to 2.0.1. From Windows Explorer, run FTVERCHK.EXE from the \FTSVTOOL\VERSION directory of 363-01639-002 Express5800/320Lb EXPRESSBUILDER CD version 3.005b-G. The installed version is displayed. If 2.0.1 or higher is displayed, there is no need to perform this upgrade.
2. Confirm that the STATUS 2 LEDs on each PCI module are green.
3. Document the disk mirroring configuration, if you have not already done so.
4. Document the Network (LAN) teaming configuration in the Intel PROSet II utility, if you have not already done so.
5. Using the Intel PROSet II utility, remove all network adapters from all teams.
6. Using the Intel PROSet II utility, remove all teams.
7. Uninstall the Intel PROSet II utility.
8. Reboot the 320Lb.
9. Confirm that the STATUS 2 LEDs on each PCI module are green.
10. Insert the 363-01639-002 Express5800/320Lb EXPRESSBUILDER CD version 3.005b-G.
11. When the EXPRESSBUILDER program appears click on the "Setup / Update Express5800 System" menu or run \winnt\w2k\update.exe from the CD.
12. Click *OK* in response to the *Setup message* prompting the user to apply Windows 2000 Service Pack 4.
13. Depending on the media you are using to apply Windows 2000 Service Pack 4:
    a. Insert Microsoft Windows 2000 Service Pack 4 CDROM while pressing the SHIFT key to prevent the start of the autorun program and click *Yes* to continue
       If the autorun program of the Service Pack CDROM stars, simply close it.
    b. If you are using a Windows 2000 Service Pack 4 executable saved on your hard drive, Click on *No*, and when the next dialog box appears, type in the directory path to the W2KSP4.EXE file or to the update.exe file if you are using an

extracted version of Service Pack, then Click on *OK*.
Note: the dialog box in this instance will display question marks and possible random characters as it has been designed for the localized Japanese Windows version. You can still type the directory path in the appropriate box and click on *OK*.

14. Depending on the Service Pack 4 media you used:
    a. If you used the Microsoft CDROM:
       The Service Pack will be applied and you will be asked to insert the 363-01639-002 Express5800/320Lb EXPRESSBUILDER CD version 3.005b-G again. Press the SHIFT key to prevent the autorun to start automatically.
    b. If you used a Service Pack saved on your hard drive:
       The Service Pack will be applied automatically
15. Click *OK* in response to the *Setup message* prompting the user to continue the update.
16. Follow the instructions on the screen, as appropriate.
17. When the 320Lb reboots, remove the 363-01639-002 Express5800/320Lb EXPRESSBUILDER CD version 3.005b-G.
18. IMPORTANT: If the message, "*Windows - FT Orphaning A disk that is part of a fault-tolerant volume can no longer be accessed*" is displayed during the update process, an OS stop error may occur when restarting the OS. If an OS stop error occurs, perform the procedures documented below under the heading of FT Orphaning OS Stop Recovery Procedure.
19. Confirm that the STATUS 2 LEDs on each PCI module are green.
20. Check disk mirroring. If any disk mirrors are disabled, re-mirror the appropriate disks. **WARNING:** *Do not restart the system until disk mirroring is complete.*
21. Launch Device Manager, select the *Devices by connection* view. Uninstall the following entries:
    a. Stratus Fault Tolerant Virtual 69000 Video. **NOTE:** *Do not uninstall instances of the Stratus Fault Tolerant Virtual 69000 Video which are found as child entries in the ACPI Multiprocessor ftServer tree.*
    b. (!)Unknown device.
22. As appropriate for any installed option board(s) run the indicated batch file(s) below from the \winnt\w2k directory of 363-01639-002 Express5800/320Lb EXPRESSBUILDER CD version 3.005b-G.
    a. For the 1 channel 10/100Mbps Fast Ethernet PCI Card, run: N8804001.BAT.
    b. For the 1 channel PCI Ultra 2 SCSI card for tape drive, run: N8803002.BAT.

c. For the QLA2310 Qlogic fibre channel HBA, run: N8803030.BAT.
d. For the Intel Pro1000 Fibre Ethernet NIC, run: N810484.BAT
e. For the Intel Pro1000 Copper Ethernet NIC, run: N8104103.BAT

23. Reboot the system.
24. Confirm that the STATUS 2 LEDs on each PCI module are green.
25. Re-establish the original LAN Teaming configuration.
26. Update Veritas Volume Manager
    a. Launch VERITAS Enterprise Administrator
        i. Select Help->About
        ii. Record the VERITAS Volume Manager for Windows 2000 Version, for example: 5.31.45.7 or 5.31.45.8.
        iii. If the VERITAS Volume Manager for Windows 2000 Version is 5.31.45.8 + Service Pack 01 (5.31.55.0), proceed to step 27. There is no need to update VERITAS Volume Manager.
    b. If VERITAS Volume Manager for Windows 2000 Version 5.31.45.8 is installed but Veritas Service Pack 01 is not installed, proceed as follows to install Veritas Service Pack 01:
        i. From Windows Explorer, run VMW2K31SP01a.MSI from the \VXVM\SP01a directory of 363-01639-002 Express5800/320Lb EXPRESSBUILDER CD version 3.005b-G.
        ii. Follow the on screen instructions.
        iii. Restart the system when prompted to do so.
        iv. Confirm the update was successful:
            1. Launch VERITAS Enterprise Administrator
            2. Select Help->About
            3. The VERITAS Volume Manager for Windows 2000 Version should be 5.31.45.8 + Service Pack 01 (5.31.55.0).
    c. If VERITAS Volume Manager for Windows 2000 Version 5.31.45.7 is installed, proceed as follows to update Volume Manager and install Service Pack 01:
        i. Uninstall the following programs in the order listed (it is not necessary to restart the system until all programs are uninstalled):
            1. VERITAS Volume Manager 3.1.
            2. VERITAS Enterprise Administrator Service.
            3. VERITAS Enterprise Administrator.
        ii. Restart the system.
        iii. If a *System Settings Change* dialog appears prompting you to restart your system, select *yes*.

iv. Run FTREINST.BAT from the \VXVM directory of the 363-01639-002 Express5800/320Lb EXPRESSBUILDER CD version 3.005b-G. **NOTE:** If you open a Command Prompt box to run the batch file, the Windows Installer display may be hidden by the box.
    1. Follow the on screen instructions.
    2. Perform the Server installation.
    3. Enter the Veritas Volume Manager 3.1 License Key, when prompted.
    4. Select Next on the Custom Setup screen without making any changes to the program features to be installed.
    5. Click OK on the DMP Un-installation warning screen.
    6. Click Install on the "ready to Install Program" screen.
    7. Click Finish on the "InstallShield Wizard Completed" screen.
    8. Cancel the VERITAS online registration process.
    9. When prompted to remove the CD-ROM for the system to reboot to apply changes, press enter, remove the CD-ROM once the system begins to restart.

v. Confirm the update was successful:
    1. Launch VERITAS Enterprise Administrator
    2. Select Help->About
    3. The VERITAS Volume Manager for Windows 2000 Version should be 5.31.45.8 + Service Pack 01 (5.31.55.0).

27. Install the NEC ESMPRO Report Service for Volume Manager.
    a. In a Command Prompt box, run "NECSETUP ADD" from the \VXVM\ALERTMAN directory of the 363-01639-002 Express5800/320Lb EXPRESSBUILDER CD version 3.005b-G.
    b. The process will complete with no intervention required.
    c. Update the System Registry on ESMPRO Management Workstations. **NOTE:** This step does not apply to the 320Lb.
        i. Add the key "VxVM" to HKEY_LOCAL_MACHINE\SOFTWARE\NEC\NVBASE\AlertViewer\AlertType, if not already present.
        ii. Add the following string values under VxVM:
            1. Value Name: WavDefault, Value Data: Server.wav
            2. Value Name: AniDefault, Value Data: Default.bmp

3. Value Name: Image, Value Data: Default.bmp
4. Value Name: SmallImage, Value Data: Default.bmp

28. Reboot the system.
29. Check disk mirroring. If any disk mirrors are disabled, re-mirror the appropriate disks. **WARNING:** *Do not restart the system until disk mirroring is complete.*
30. Confirm that ft control software 2.0.1 is installed. From Windows Explorer, run FTVERCHK.EXE from the \FTSVTOOL\VERSION directory of 363-01639-002 Express5800/320Lb EXPRESSBUILDER CD version 3.005b-G. The installed version is displayed.

ESMPRO Agent Update

An ESMPRO Agent update is available on the 363-01639-002 Express5800/320Lb EXPRESSBUILDER CD version 3.005b-G. The ESMPRO Agent Update is not required to complete the FT Control Software version 2.0.1 Upgrade Procedure. To install the update:

a. Review and document the ESMPRO Agent settings. The update may overwrite some or all settings.
b. From Windows Explorer, run SMASETUP.BAT from the \ESMPRO\EN\WINNT\AGENTW2K directory of 363-01639-002 Express5800/320Lb EXPRESSBUILDER CD version 3.005b-G.
c. Follow the prompts on the screen.
d. A completion screen will appear. The new version of the ESMPRO Agent is 4.0a.
e. The BMC tools will be updated.
f. The ESMPRO Agent Policy update will be applied
g. The system will be rebooted when the updates are complete.
h. Review the ESMPRO Agent settings and restore as needed.

FT Orphaning OS Stop Recovery Procedure

If the message, "Windows - FT Orphaning A disk that is part of a fault-tolerant volume can no longer be accessed" is displayed during the update process, an OS stop error may occur when restarting the OS. If an OS stop error occurs, perform the following procedures.

NOTE: *These procedures will successfully update the system but disk mirroring will be disabled. Check disk mirroring upon the completion of the Recovery Procedure and re-mirror as necessary.*

Recovery Procedure:

a. Power off the system by pressing and holding the POWER switch.
b. Make sure that the two BMC status LEDs of the PCI modules (for Group 1/ Group 2) are turned off. **IMPORTANT:** *While the BMC status LED is blinking red, do **not** proceed to the next step. Otherwise the BMC firmware damage may result.*

c. Remove the power cord from the AC inlet of the primary PCI module. The primary PCI module is indicated by an illuminated POWER LED (POWER switch). Figures 1-4 and 1-5 (pages 1-7 through 1-10) of the Express5800/320Lb/320Lb-R User's Guide, 456-01675-000, (available on EXPRESSBUILDER) identify Group 1 and Group 2 PCI modules and the appropriate AC inlet.

d. Verify that the POWER LED (POWER switch) of the remaining PCI module connected to AC power is illuminated green. **IMPORTANT:** *If this is not the case, repeat steps b and c.*

e. *Reconnect the power cord which was unplugged in Step c.*

f. Make sure that the two BMC status LEDs of the PCI mocules (for Group1/for Group2) are turned off. **IMPORTANT:** *While the BMC status LED is blinking red, do **not** proceed to the next step. Otherwise the BMC firmware damage may result.*

g. Press the POWER switch of the primary PCI module, which is illuminate green, to power on the system.